

NATIONAL KARNAL BUNT WHEAT GRAIN SURVEY PLAN 2002

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National Karnal Bunt Survey FY-2002

Background:

Karnal bunt was first confirmed in the United States in Arizona on March 8, 1996. Soon after that initial discovery, the fungus was also found in parts of Texas and California. APHIS quarantined all infected areas and established a 3-mile regulated area around positive fields.

For the first time since 1997, Karnal bunt was detected in several fields outside of a regulated area. The initial discovery, made in late May 2001 at a grain elevator in Young County, TX, led to a quarantine of the entire county as well as adjacent Throckmorton County. Archer and Baylor Counties, directly north of Young and Throckmorton Counties, were also added to the regulated area after positive seed was found at several local grain elevators. The USDA APHIS initiated the quarantine in order to contain the spread of the fungus and safeguard the Nation's export wheat industry.

The National Karnal Bunt Survey was started in 1996 in response to the initial find of Karnal bunt disease in Arizona. Since then this survey has provided invaluable information in the form of negative occurrence data to support the export of U.S. wheat to all foreign markets. The survey was developed to identify areas in which Karnal bunt did not occur. Due to the new Karnal bunt detection in Texas we have reviewed the National Survey protocols; we have explored new survey, detection, and analysis technologies, and have revised the survey protocols and techniques to take advantage of these advances. We will continue to explore new technologies and make changes to future survey protocols as the new technologies become available.

Purpose:

The primary purpose of the national survey is to provide U.S. certifying officials the ability to issue phytosanitary certificates required by any and all countries to which we export (or may export) wheat. The FY-2002 survey is designed to support the pest free status of wheat productions areas outside of any Karnal bunt regulated zones.

The results of this National Survey will also be used to determine the need for and the scope of new regulations if bunted kernels are recovered from areas not previously known to be infected with Karnal bunt disease.

National Survey Areas:

The national survey will be conducted in those areas of the United States where Karnal bunt has not been previously detected.

Eastern Region: New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, West Virginia, Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, North Carolina, Kentucky, Mississippi, Tennessee, South Carolina, Alabama, Georgia, and Florida.

Western Region: Washington, Nevada, Oregon, Idaho, Utah, Montana, Wyoming, Colorado, New Mexico, North Dakota, South Dakota, Nebraska, Kansas, Oklahoma, Louisiana, Arkansas, Missouri, Iowa, and parts of California, Arizona, and Texas.

Crops to be surveyed:

Wheat, durum wheat, and triticale from producing counties not sampled during the 2001 harvest year and where Karnal bunt has not been previously detected.

Grain Samples – Protocols:

The survey will collect representative samples from counties where susceptible host crops are produced according to statistics provided by USDA, National Agricultural Statistics Service (NASS). The number of samples will be based on the average production of each host for a 5-year period 1997-2001. This information may be obtained by using the NASS website (www.usda.gov/nass). From the home page, click on the selection for **On-line DATA BASE** then select **State (all counties)** from the **Crops County Data** menu. From the **Crops County and District data menu**, select the information needed to plan the survey for the state. The data should be downloaded onto a disk because of the volume on information produced. The survey does not intend to sample every local elevator. It is an attempt to represent crop production within all production areas. Aggregation point samples provide the best representation of local crop conditions.

The official composite sample size for the bunted kernel analysis is 4 pounds. An additional 250 gram sample should be taken and retained by the state as a reference sample. This additional sample may be stored in a Nalgene bottle, that has been provided, or any other appropriate container. Once the 4-pound composite sample has been determined free of Karnal bunt, the 250 gram reference sample may be disposed of by the state. If a bunted kernel is found in the 4-pound composite sample, the 250 gram reference sample will be held for additional analysis in instances when the integrity of the original analysis is challenged. When the original positive determination is accepted by the parties involved, the 250 gram reference sample may be disposed of.

If a county has more than one county/local elevator, choose elevators to sample that best represent the entire county. Though each elevator may not receive host material from the entire county, pick those that best represent the county.

If a county is represented in the NASS data but has no county elevator, samples should be taken from the elevators to which the grain is shipped. This may require samples be taken from elevators in adjacent counties or even adjoining states.

Each elevator normally takes a moisture and/or quality sample from each load arriving at the elevator. If arrangements can be made with the elevator to save all or a portion of these samples by placing them in a barrel, national survey samples may be taken when each barrel approaches capacity. This will represent a sampling of all wheat coming into the elevator. Once national survey samples have been taken, the barrels may be emptied. The objective is to take a 4-pound sample that represents all the wheat in the barrel. This can be done either using a small grain probe or using a disposable plastic cup to dip grain from several locations within the barrel. The probe should be cleaned using an alcohol wipe after the wheat in the barrel has been sampled and a new cup and gloves should be used for each new sample.

If the barrel sample method cannot be used, run the wheat out of one or more grain bins and use disposable 16-oz plastic cups to collect grain from the belt until a 4-pound sample has been collected. Mechanical samplers (diverters) should be used if available for collecting samples from a belt.

The State Karnal Bunt Coordinator will create a list of all elevators to be surveyed in a state with the contact person identified for each location and keep it as a file. At least once during the sampling season, a PPQ representative should visit each elevator participating in survey sampling. The purpose of the visit is to observe the sampling process and to provide information and answer questions concerning the program.

National Survey Sampling – Timing

The ideal time to sample grain for Karnal bunt is immediately after wheat harvest. However, grain samples may be collected at any time. An important element to remember when evaluating the timing of sample collection is the longer after harvest the samples are collected and analyzed the greater the chance of having to regulate a much larger area if a sample comes up positive, due to grain movement which may have already occurred. Samples can be taken from local elevators before the harvest is complete if the sample taken is representative of the county in which it was taken and meets the minimum requirements in sampling protocol

National Survey Sampling - Intensity:

During the 2002 wheat harvesting year, samples will be collected in parallel with wheat harvest and in proportion to wheat production from producing counties not sampled during the 2001 harvest year and where Karnal bunt has not been detected.

The minimum sampling requirement is one 4-pound sample from a selected county with 1,000,000 bushels of production or more. Each sample will represent approximately 1,000,000 bushels of host crop. Samples will be collected at points of aggregation near their production areas (local elevators).

A sample will consist entirely of one species; grain of different susceptible species should not be mixed. To the extent possible, samples should be composites of grain from a production area not larger than a county and each sample should contain grain from a single county. To insure a good representative sample, subsamples, which are represented in the composite sample, should represent at least 10 different producers whenever possible.

When there are several counties within a state where each produces less than 1,000,000 bushels of host crop, the state may wish to take samples from each county and combine them into a 4-pound composite sample. If this is done, a 250 gram reserve sample from each county should be held by the state. Once the 4-pound composite sample has been determined free of Karnal bunt, the 250 gram reference samples may be disposed of by the state. If a multi-county composite sample is positive for Karnal bunt, the individual county reference samples will be tested to help determine which county produced the bunted kernel.

Another sampling method that may be used is collecting samples from the storage or transfer bins at county elevators. ***This is not a preferred method as it is much harder to establish the identity of growers represented.*** If samples are to be collected in this manner then samples of host material should be taken from each accessible bin in the elevator. The collector should ask the elevator to run grain onto the belt for a short time and then take a sample of grain from the belt (or any other accessible point). Each bin would represent a composite sample, all bin samples would then be combined, mixed and the official composite 4-pound sample taken.

National Survey Sampling – Packaging and Shipping:

Grain samples should be placed in a new heavy-duty kraft paper bag, as provided. The top of the bag should be rolled down to squeeze out as much air as possible, then the bag stapled shut. Each sample should then be placed in a plastic bag along with a completed copy of the attached information sheet (See Appendix B) and the plastic bag sealed.

Six to eight samples should be packaged in a sturdy box for shipping to an approved laboratory for analysis. Samples should be shipped within 48 hours of being collected. Samples will be shipped via overnight carrier to the Olney processing facility.

USDA, APHIS, PPQ
Karnal Bunt Project
220 East Main Street
Olney, TX 76374

Other laboratories may request APHIS approval for screening survey samples and KB analysis. If additional laboratories are approved by APHIS, Appendix D will be updated and regional Coordinators notified.

An account has been established with United Parcel Service (UPS) for use by cooperators and federal personnel when shipping National Karnal Bunt Survey samples for analysis. The administrative contact, for obtaining specific information concerning use of the account, is Mr. Marco Benavidez, Budget Analyst for the Western Region. He can be contacted at (970) 494-2555.

Sample Analysis:

National survey samples submitted to Olney, TX will be analyzed using an optical sorter. The application of this technology has been developed by the USDA ARS. The high speed optical sorter will remove suspect bunted kernels from samples. The optical sorter can process a 4-pound sample in less than a minute and typically will reduce the number of kernels that need to be examined to about 8% of the original sample. This reduction allows the staff to focus time and attention on truly potential positives, rather than the time consuming initial sorting process. The suspect kernels will then be visually examined by trained personnel. This technology will significantly reduce the processing time for samples.

Any other APHIS approved laboratories will probably use grain inspection machines (Figure D-2 of Appendix D of the Karnal Bunt Manual at: <http://www.aphis.usda.gov/ppq/emergencyprograms/karnalbunt/kbmanual041802.pdf>) and visual examinations by trained personnel to analyze samples for bunted kernels.

Sample processing centers: Bunted Kernel Analysis:

A sample processing center is being set up in Olney, Texas in cooperation with the current KB regulatory facility there. Samples will be processed as they arrive and the results returned to the submitting state.

Those states wishing to perform the analysis on their own samples are welcome to do so; the standard for sample analysis will be the bunted kernel examination, although spore analysis is approved as a screening procedure. All facilities must be approved by APHIS prior to analyzing Karnal bunt samples.

Reports:

Sampling plan reporting – Prior to the survey season, each Regional Coordinator should provide the Karnal Bunt Headquarters staff with the following information:

1. A list of states participating in the survey and those not participating,
2. The location where each state plans to have their sample analysis done,
3. The number of proposed samples by state,
4. The estimated date to begin sampling,
5. The estimated date sampling will be completed, and
6. The number of counties in each state participating in the survey

Results reporting:

- A. **Negative Samples** – The laboratory conducting the sample analysis will report negative sample findings to the State Karnal Bunt Coordinator of the submitting state. The report will be forwarded at the end of each week via e-mail or FAX to the State Karnal Bunt Coordinator with a copy sent by FAX to Headquarters (301-734-8584). Once the State Karnal Bunt Coordinator notifies the laboratory conducting the analysis that the harvest season for the state is complete, the laboratory will issue a summary report for that state within 10 days of the last samples received for analysis. A copy of this report will also be sent by FAX to Headquarters at the above listed phone number.

The SPHD will provide the testing results to the State Survey Coordinator or data entry person for entry into NAPIS.

- B. **Suspect Positive Samples** – The laboratory prepares the bunted kernel specimen and appropriate microscope slide with teliospores and sends them by overnight courier to the PPQ National Identifier (Dr. Mary Palm) or to personnel designated by the National Identifier. The specimen should include a copy of the original National Karnal Bunt Wheat Grain Survey – 2002 form (See Appendix B) which was submitted with the original grain sample and the phone number of the State Plant Health Director.

Slides should be packed carefully in small cardboard boxes so they do not break during shipping and handling and sent by overnight mail. The package should be labeled “urgent” and “fragile.”

The Project Director in Olney, TX (or in the case of states analyzing their own samples, the State Plant Regulatory Official, SPRO) notifies the submitter, the State Plant Health Director (SPHD) from the state where the sample originated, the National Identifier, and the Karnal Bunt Senior Program Manager (Bob Spaide, 301-252-9452 or 410-798-9042) in Riverdale, MD that a suspect bunted kernel is being sent for confirmation.

The National Identifier notifies the Karnal Bunt Senior Program Manager, the Project Director in Olney (or in the case of states analyzing their own samples, the State Plant Regulatory Official, SPRO), and the SPHD in the state that submitted the sample to advise them that the sample is positive or negative for *Tilletia indica*. The SPHD will provide the testing results to the State Survey Coordinator or data entry person for entry into NAPIS.

See Appendix C for detailed time line for submitting suspect positive specimen(s).

Primary Contacts:

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Appendices

Appendix A – State Karnal Bunt Survey Coordinators

Appendix B – Sample Information Form

Appendix C – Confirmation and Response Timeline

Appendix D - Bunted Kernel Analysis Centers

Appendix A

State Karnal Bunt Coordinators

STATE	NAME ADDRESS	Telephone FAX E-mail (FTS)
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AK	Christina Jewett USDA APHIS PPQ 3301 C Street, Suite 201 Anchorage, AK 99503	(907) 271-1239 (907) 271-1241 christina.l.jewett@aphis.usda.gov
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AR	Joel Bard USDA APHIS PPQ 1200 Cherry Brook Drive, Suite 100 Little Rock, AR 72211	(501) 324-5258 (501) 324-5230 joel.w.bard@aphis.usda.gov
AZ	Terry Ely USDA APHIS PPQ 3658 Chipman Road Phoenix, AZ 85040	(602) 431-8930 (602) 438-0877 Terrance.F.Ely@aphis.usda.gov
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	Cliff Ramos CDFA, Plant Pest Detection 1220 N. Street, Suite A-330 Sacramento, CA 95814	(916) 654-1211 (916) 654-0555 cramos@cdfc.ca.gov
CO	Patrick W. McPherren USDA APHIS PPQ 3950 N. Lewiston, Suite 330 Aurora, CO 80011-1555	(303) 371-3355 (303) 371-4774 patrick.w.mcpferren@aphis.usda.gov

CT	Patricia M. Douglass USDA APHIS PPQ 900 Northrop Road, Suite C Wallingford, CT 06492	(203) 269-4277 (203) 284-9031 Patricia.M.Douglass@aphis.usda.gov
DE	Colleen Kitzmiller USDA APHIS PPQ 300 S. News Street, RM. 1107 Dover AFB, DE 19904	(302) 678-5868 (302) 734-7814 colleen.kitzmiller@aphis.usda.gov
FL	Tim Schubert FDACS/DPI P.O. Box 147100 Gainesville, FL 32614-7100	(352) 372-3505 X 143 (352) 372-0737 schubet@doacs.state.fl.us
GA	Robert Grant USDA APHIS PPQ 5645 Riggins Mill Road Dry Branch, GA 31020	(912) 752-1734 (912) 752-1734 robert.d.grant@aphis.usda.gov
IA	Mark Hollister USDA APHIS PPQ 6000 Fleur Drive Des Moines International Airport Des Moines, IA 50321-2871	(515) 285-7044 (515) 285-7524 Mark.G.Hollister@aphis.usda.gov
	John Haanstad Entomology and Seed Bureau 1 st Floor, Wallace Bldg. E. 9 th Street & Grand Avenue Des Moines, IA 40316	(515) 242-5180 (515) 242-6371 John.Haanstad@idals.state.ia.us
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	Liz Vavrika Idaho State Department of Agriculture 2270 Old Penitentiary Road P.O. Box 790	(208) 334-8620 (208) 334-2283 lvavrika@agri.state.id.us

Boise, ID 83701

IL	Laura Ettema Khan 1817 South Neil Street Illini Plaza, Suite 105 Champaign, IL 61820	(630) 542-7324 Cell phone Laura.Ettema-Khan@aphis.usda.gov
	Stan Smith Illinois Department of Agriculture 9511 Harrison, Room A169 CMS North Suburban Des Plaines, IL 60018	(847) 294-4343 (847) 294-4350 sesmith@mc.net@i@gw
IN	Gary Simon USDA APHIS PPQ 120 Professional Court, Suite D Lafayette, IN 47905	(765) 446-1263 (765) 446-8274 Gary.W.Simon@aphis.usda.gov
KS	Russell A. McKinney USDA APHIS PPQ 1947 N.W. Topeka Blvd Topeka, KS 66608	(913) 235-0212 (913) 235-1464 russell.a.mckinney@aphis.usda.gov
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MN	Kevin Connors USDA APHIS PPQ P.O. Box 18 Minneapolis, MN 55111	(612) 725-1722 (612) 725-1723 kevin.j.connors@aphis.usda.gov
MO	Mike Brown State Entomologist Missouri Department of Agriculture P.O. Box 630 Jefferson City, MO 65102	(573) 751-5505 (573) 751-0005 Michael_Brown@mail.mda.state.mo.us
MS	Jeff Head USDA APHIS PPQ Mail Stop 9655 Mississippi State, MS 39762	(662) 325-3140 (662) 325-8955 jeffery.l.head@aphis.usda.gov

MT	Lori Witham Field Services Bureau Agricultural Sciences Division Montana Department of Agriculture P.O. Box 200201 Helena, MT 59620-0201	(406) 444-3730 (406) 444-7336 Lwitham@state.mt.us
	Gary D. Adams USDA APHIS PPQ 1220 Cole Avenue Helena, MT 59601	(406) 449-5210 (406) 449-5212 Gary.D.Adams@aphis.usda.gov
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NJ	Barry C. Emens USDA APHIS PPQ P.O. Box 330	(609) 984-3707 (609) 292-4710 barry.c.emens@aphis.usda.gov

Trenton, NJ 08625

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NM	Aaron Miller USDA APHIS PPQ 270 S. 17 th Street Las Cruces, NM 88005	(505) 527-6985 (505) 527-6986 Aaron.B.Miller@aphis.usda.gov
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RI	Patricia M. Douglass USDA APHIS PPQ 900 Northrop Road, Suite C Wallingford, CT 06492	(203) 269-4277 (203) 284-9031 Patricia.M.Douglass@aphis.usda.gov
SC	Gilbert E. Rowe USDA APHIS PPQ 1949 Industrial Road, Room 153 Conway, SC 29526	(843) 365-6990 (843) 336-6599 gilbert.e.rowe@aphis.usda.gov
SD	Dr. Greg Buntrock South Dakota Department of Agriculture 523 E. Capital Avenue Pierre, SD 57501	(605) 773-3796 (605) 733-3481 gregory.buntrock@state.sd.us
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TX	George Nash USDA APHIS PPQ 903 San Jacinto Blvd. Suite 270 Austin, TX 78701-2450	(512) 916-5241 (512) 916-5243 george.h.nash@aphis.usda.gov
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	Clinton Campbell Washington State Department of Agriculture Laboratory Services P.O. Box 42560 Olympia, WA 98504-2560	(360) 902-2071 (360) 753-5047 ccampbell@agr.wa.gov
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Wheat Grain Sample Information Form

NATIONAL KARNAL BUNT WHEAT GRAIN SURVEY - 2002
STATE SUBMITTING THE SAMPLE
NAME OF ELEVATOR
ELEVATOR LOCATION
PRODUCTION COUNTY OR COUNTIES AND STATE
TYPE OF GRAIN (HARD RED WHEAT, DURUM WHEAT, TRITICALE, SOFT WHITE WHEAT, ETC.)
SOURCE OF SAMPLE <input type="checkbox"/> Grain elevator <input type="checkbox"/> Cereal (Mill) <input type="checkbox"/> Research <input type="checkbox"/> Truck <input type="checkbox"/> Railroad <input type="checkbox"/> Farm Storage
DATE SAMPLE WAS TAKEN
NAME AND TELEPHONE NUMBER OF PERSON TAKING SAMPLE
AGENCY OF EMPLOYEE TAKING SAMPLE <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> University <input type="checkbox"/> Other (Specify)
STATE NATIONAL SURVEY SAMPLE IDENTIFICATION NUMBER

Each State Karnal Bunt Survey Coordinator should establish and assign State National Survey Sample Identification Numbers for their state. The sample number will consist of the two letter state abbreviation plus a sequential three digit number beginning with 100. Example the first sample from Maryland would be MD-100, the second sample would be MD-101, etc.

Original form should be completed on site as sample is taken. When possible, a copy should be left with the elevator operator. Additional copies should be made for the State Plant Health Director's file and a copy for the State Plant Regulatory Official. The original form should go forward with the sample.

**THIS FORM SHOULD BE PHOTOCOPIED FOR USE IN THE FIELD.
THERE WILL BE NO DISTRIBUTION OF PREPRINTED FORMS FROM
A CENTRAL SOURCE.**

Confirmation and Response Timeline

Appendix C

The purpose of this Appendix is to provide a timeline for the confirmation and response when Karnal bunt is confirmed from samples found during the National Karnal Bunt Survey.

The National KB Survey collects composite samples of wheat grain at country elevators throughout the United States. Four pound samples are drawn at each location participating in the National Survey. Samples from the composite sample, with proper labeling and documentation, are sent by overnight courier service as 4 pound samples to the National Karnal Bunt Survey analysis laboratory in Olney, Texas. States wishing to analyze their own samples may do so but must request AHPIS to approve the facility.

The following procedure is to be followed in the event a suspect bunted kernel is found in a National Survey sample. Because of the ramifications of a positive National Survey detection from these samples, normal identification authority can be used as a tentative identification in determining a positive find, but no action will be taken without final verification from the National Identifier (Plant Pathology, i.e, Mary Palm).

The following are not sequential, but concurrent actions by day:

Day 1: The National Survey analysis laboratory detects a bunted kernel suspected to be *Tilletia indica*

- A. Sample analyzed for bunted kernels and a suspect positive is found.
- B. The laboratory prepares the bunted kernel specimen and appropriate microscope slide with teliospores and sends them by overnight courier to the PPQ National Identifier (Plant Pathology) or to personnel designated by the National Identifier (list to be provided). Included with the specimen is the National Survey number, the county and state the sample came from, the name and phone number of the submitter and the name and phone number of the State Plant Health Director from the state the sample came from.

(If the event occurs on Friday, arrangements will be made to deliver the slides to the National Identifier or personnel authorized by the National Identifier for confirmation on Saturday. Overtime for the National Identifier will be authorized under the Karnal bunt accounting code to perform weekend identification.)

- C. The Project Director in Olney, TX (or in the case of states analyzing their own samples, the State Plant Regulatory Official, SPRO) notifies the submitter, the State Plant Health Director (SPHD) from the state where the sample

originated, the National Identifier, and the Karnal Bunt Senior Program Manager in Riverdale, MD (Bob Spaide) that a suspect bunted kernel is being sent for verification.

- D.** The Karnal Bunt Senior Program Manager notifies the Director of SEPPC, the National Survey Coordinator, the Deputy Administrator, and the Undersecretary of the suspect find. The SPHD in the originating state notifies the Regional representative and the State Plant Health Regulatory Official (SPRO) in that state.
- E.** Regional representative will alert Rapid Response Team (RRT) to report to the area of the tentative detection.

Day 2: National Identifier receives sample and makes determination:

- F.** The National Identifier notifies the Karnal Bunt Senior Program Manager, the Project Director in Olney, and the SPHD in the state that submitted the sample to advise them that the sample is positive or negative for *Tilletia indica*. (If negative, call off the RRT alert).
- G.** If the determination is positive, the Karnal Bunt Senior Program Manager notifies the Director of SEPPC, the National Survey Coordinator, the Deputy Administrator, the Undersecretary, Investigative and Enforcement Services (IES), Legislative and Public Affairs (LPA), President of the National Plant Board, and NASDA contact of the positive find as a result of the National Survey.
- H.** If the detection is in a new state, the previously prepared Decision Memorandum to the Secretary requesting a Declaration of Extraordinary Emergency is expedited.
- I.** SPHD notifies the Region and the SPRO in the origin state and requests a minimum of two PPQ Officers (from within state or RRT) and the area's IES Investigator to arrange travel to affected elevator.
- J.** The SPHD or his designee and state cooperators travel to the facility in preparation to evaluate the status of grain represented by the sample and issue an Emergency Action Notice if appropriate.

Day 3: Initial contact with facility and confirmation notifications

- K.** The SPHD or his designee with state cooperators should explain to elevator manager what regulatory actions and treatments will be required as described in Chapter 3 of the Karnal Bunt Manual and the availability for compensation as described in 7CFR310.89-16. A copy of the KB Manual may be obtained by going to the Karnal Bunt Web Page, www.aphis.usda.gov/emergencyprograms/karnalbunt, and clicking on Karnal Bunt Program Manual. Information concerning compensation is available in 7CFR 301.89-16. A copy of the CFR may be obtained by going to the Code of Federal Regulations web Page, www.access.gpo.gov/nara/cfr, and select the New Code of Federal Regulations browse feature.
- L.** An investigation begins to determine extent of infection in elevator or site and initiation of the trace forward and trace back investigation.
- M.** A State Plant Regulatory Official (SPRO) letter is electronically communicated to the states and President of National Association of State Departments of Agriculture (NASDA) with pertinent information
- N.** A conference call is scheduled with NASDA, President of NPB (and designees), and appropriate Federal agencies, states and industry to provide status of situation.
- O.** First RRT appropriate local PPQ personnel and/or RRT report for duty to SPHD.

Regional plans for implementing a program must be prepared in advance of detecting KB. It is recommended that SPHD be advised that, should an outbreak occur in their state, they will be responsible for the day-to-day operations of the program onsite for the season. An alternative is for a Regional Director designee to assume management of the day-to-day activities onsite for the season. The need for fulltime dedication of a manager/s is to ensure program continuity and decision making.

In advance of the next crop year Regional offices should develop a schedule (May-September) of personnel by name for TDY assignment to the program location. This roster will serve as the core for rotating personnel through the program.

Day 4: Additional local PPQ personnel and/or RRT report for duty to SPHD.

Consult the following documents, the Karnal Bunt Program Manual at: <http://www.aphis.usda.gov/ppq/emergencyprograms/karnalbunt/kbmanual041802.pdf> and the compensation rule, 7 CFR 301.89-16 from the Code of Federal Regulations: http://www.access.gpo.gov/nara/cfr/cfrhtml_00/Title_7/7cfr301_00.html

Appendix D

APHIS APPROVED BUNTED KERNEL ANALYSIS CENTERS FOR KB WHEAT GRAIN SAMPLE ANALYSIS

May 6, 2002

Arizona

Arizona State Agricultural Laboratory
24422 W. Holly Street
Phoenix, AZ 85007
(602) 532-1920
Laboratory Contact: Dwight Harder

California

California Department of Food and Agriculture
Plant Pest Diagnostics Lab
3294 Meadowview Road
Sacramento, CA 95832-1448
(916) 262-1132
Laboratory Contact: Dr. Tim Tidwell, Director

Idaho

Idaho State Department of Agriculture
Plant Industry Laboratory
2270 ID Penitentiary Road
P.O. Box 790
Boise, ID 83701
(208) 332-8640
Laboratory Contact: Liz Vavricka

New Mexico

New Mexico State University Karnal Bunt Lab.

NMSU-CES

Extension Plant Pathologist

P.O. Box 30003, MSC 3AE

Las Cruces, NM 88003

(505) 646-1621

Laboratory Contact: Dr. Natalie Goldberg

North Carolina

North Carolina Department of Agriculture and Consumer Services

2111 Reedy Creek Road

Raleigh, NC 27603

(919) 733-3930

Laboratory Contact: Betsy Randall-Schadell

Oregon

Oregon Department of Agriculture

635 Capitol NE

Salem, OR 97301

(503) 986-4664

Laboratory Contact: Gene Milbrath, Director

Texas

USDA, APHIS, PPQ

Karnal Bunt Laboratory

220 East Main Street

Olney, TX 76374

(940) 564-4034

Laboratory Contact: Bobby Guerra or Barte Smith

Washington

Washington State Department of Agriculture

Plant Pathology Laboratory

3939 Cleveland Avenue SE

Olympia, WA 98501

(360) 902-2060

Art Wagner